

WHAT IS CLAIMED IS:

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5 1. A method for creating a single digital image file from multiple digital images, comprising:  
using a single imaging station to generate a plurality of digital images from a medium,  
each digital image representing the same source image on the medium; and  
combining the plurality of digital images to create a single enhanced digital image which  
represents the source image.

2. The method as recited in claim 1, wherein the medium comprises developing film.

3. The method as recited in claim 1, wherein the imaging station comprises a radiation source  
and a radiation sensor.

4. The method as recited in claim 1, further comprising:  
moving the medium through the single imaging station in a continuous uni-directional  
path.

5. The method as recited in claim 4, wherein the medium is moved by applying the medium to  
a transport structure and rotating the structure.

6. The method as recited in claim 1, wherein the medium comprises developing film, and the  
imaging station comprises a back source configured to apply radiation to the back of the  
developing film, a front source configured to apply radiation to the front of the developing film,  
a back sensor configured to sense radiation from the back of the developing film, and a front  
5 sensor configured to sense radiation from the front of the developing film.

7. The method as recited in claim 1, further comprising:  
aligning the plurality of digital images.

8. A method for creating a digital image file from a developing film, comprising:  
applying developer to film to cause the <sup>112</sup>film to begin to develop;

positioning a frame on the developing film in front of a source during a first film development period;

during the first film development period, applying radiation to the frame of the developing film using the source;

5       sensing first radiation from the frame of the film during the first film development period using a sensor;

creating a first digital image file from the sensed first radiation;

returning the frame to the source during a second film development period;

10       during the second film development period, applying radiation to the frame of the developing film using the source;

sensing second radiation from the frame of the film during the second film development period using a sensor;

creating a second digital image file from the sensed second radiation; and

15       combining the first and second digital image files to form a combined digital image file which represents the frame.

9. The method as recited in claim 8, wherein each sensing step comprises:

sensing radiation reflected from the front and back of the film and radiation transmitted through the film.

10. The method as recited in claim 8, wherein the positioning and returning steps are conducted by moving the film in the same direction.

11. The method as recited in claim 8, wherein the positioning and returning steps are conducted by moving the developing film in a uni-directional continuous path.

12. The method as recited in claim 11, wherein the moving step is conducted by applying the developing film to a film transport structure and rotating the structure.

13. The method as recited in claim 12, wherein the structure has a circular shape.

14. A digital film development system, comprising:

a source configured to apply radiation to a developing film strip;

a sensor configured to sense radiation from the developing film strip; and

a transportation system adapted to move the developing film strip past the source and  
5 sensor multiple times in a continuous unidirectional path.

15. The system as recited in claim 14, wherein the sensor is configured to provide multiple digital images for each frame on the film.

16. The system as recited in claim 15, further comprising:

an image processor configured to combine the digital images for each frame.

17. The system as recited in claim 14, wherein the source comprises a back source configured to apply radiation to the back of the film and a front source configured to apply radiation to the front of the film.

18. The system as recited in claim 14, wherein the sensor comprises a back sensor configured to sense radiation from the back of the film and a front sensor configured to sense radiation from the front of the film.